

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1626GMS

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 01 New pricing for the Save Answers for SciFinder Wizard within  
STN Express with Discover!  
NEWS 4 OCT 28 KOREAPAT now available on STN  
NEWS 5 NOV 30 PHAR reloaded with additional data  
NEWS 6 DEC 01 LISA now available on STN  
NEWS 7 DEC 09 12 databases to be removed from STN on December 31, 2004  
NEWS 8 DEC 15 MEDLINE update schedule for December 2004  
NEWS 9 DEC 17 ELCOM reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
NEWS 10 DEC 17 COMPUAB reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
NEWS 11 DEC 17 SOLIDSTATE reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
NEWS 12 DEC 17 CERAB reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
NEWS 13 DEC 17 THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB  
NEWS 14 DEC 30 EPFULL: New patent full text database to be available on STN  
NEWS 15 DEC 30 CAPLUS - PATENT COVERAGE EXPANDED  
NEWS 16 JAN 03 No connect-hour charges in EPFULL during January and  
February 2005  
NEWS 17 FEB 25 CA/CAPLUS - Russian Agency for Patents and Trademarks  
(ROSPATENT) added to list of core patent offices covered  
NEWS 18 FEB 10 STN Patent Forums to be held in March 2005  
NEWS 19 FEB 16 STN User Update to be held in conjunction with the 229th ACS  
National Meeting on March 13, 2005  
NEWS 20 FEB 28 PATDPAFULL - New display fields provide for legal status  
data from INPADOC  
NEWS 21 FEB 28 BABS - Current-awareness alerts (SDIs) available  
NEWS 22 FEB 28 MEDLINE/LMEDLINE reloaded  
NEWS 23 MAR 02 GBFULL: New full-text patent database on STN  
NEWS 24 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced  
NEWS 25 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
  
NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005  
  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN

03/09/2005 10689156.trn

NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 11:05:01 ON 09 MAR 2005

=>

Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE

Do you want to switch to the Registry File?

Choice (Y/n):

Switching to the Registry File...

Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 11:05:13 ON 09 MAR 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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STRUCTURE FILE UPDATES: 6 MAR 2005 HIGHEST RN 843607-47-6

DICTIONARY FILE UPDATES: 6 MAR 2005 HIGHEST RN 843607-47-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

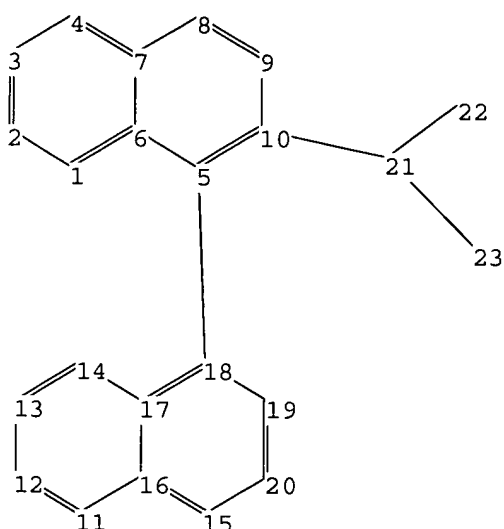
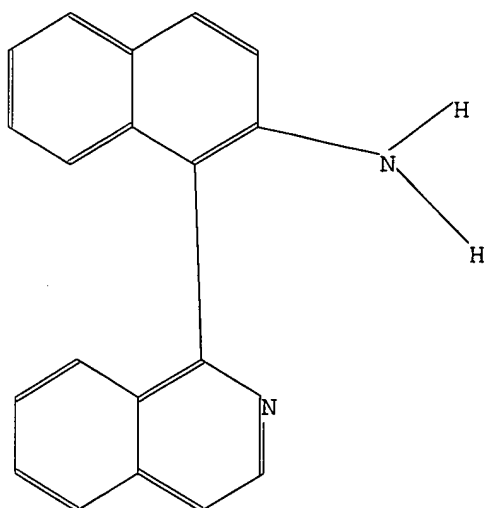
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10689156.str



chain nodes :

21 22 23

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

chain bonds :

5-18 10-21 21-22 21-23

ring bonds :

1-2 1-6 2-3 3-4 4-7 5-6 5-10 6-7 7-8 8-9 9-10 11-12 11-16 12-13 13-14  
14-17 15-16 15-20 16-17 17-18 18-19 19-20

exact/norm bonds :

10-21

exact bonds :

5-18 21-22 21-23

normalized bonds :

1-2 1-6 2-3 3-4 4-7 5-6 5-10 6-7 7-8 8-9 9-10 11-12 11-16 12-13 13-14  
14-17 15-16 15-20 16-17 17-18 18-19 19-20

isolated ring systems :

containing 1 : 11 :

Match level :

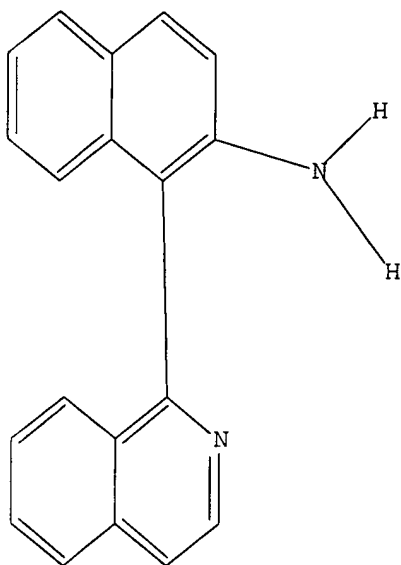
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom  
20:Atom 21:CLASS 22:CLASS 23:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 11:05:30 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 4 TO ITERATE

100.0% PROCESSED 4 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 4 TO 200  
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 11:05:36 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 73 TO ITERATE

100.0% PROCESSED 73 ITERATIONS  
SEARCH TIME: 00.00.01

L3 1 SEA SSS FUL L1

=> FIL CAPLUS  
COST IN U.S. DOLLARS  
FULL ESTIMATED COST

SINCE FILE TOTAL  
ENTRY SESSION  
161.33 161.54

FILE 'CAPLUS' ENTERED AT 11:05:41 ON 09 MAR 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11  
FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3

L4 1 L3

=> d l4 ibib abs hitstr tot

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:15223 CAPLUS

DOCUMENT NUMBER: 140:217129

TITLE: Enantioenriched axially chiral  $\beta$ -diketimines:  
Determination of the ian-amine barrier to  
atropisomerization

AUTHOR(S): Cortright, Sarah B.; Yoder, Ryan A.; Johnston, Jeffrey N.

CORPORATE SOURCE: Department of Chemistry, Indiana University,  
Bloomington, IN, 47405-7102, USA

SOURCE: Heterocycles (2004), 62, 223-227

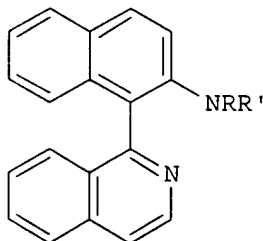
CODEN: HPCYAM; ISSN: 0385-5414

PUBLISHER: Japan Institute of Heterocyclic Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB Enantioenriched (>98% ee)  $\beta$ -diketimines derived from Isoquinoline and 2-Amino Naphthalene ("IAN-amines") were prepared Thermal racemization of a series of R-IAN amines (I; R,R' = H,H; Me,H; Me,Me ) revealed a high barrier to atropisomerization (.apprx.30 kcal/mol) and its relative insensitivity to substitution at the aminonaphthalene nitrogen. Mol.

mechanics calcns. accurately predicted the observed relative substituent effects.

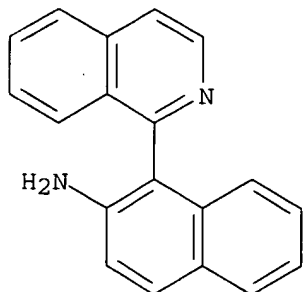
IT 664302-70-9

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)

(determination of barrier to atropisomerization in enantioenriched axially chiral  $\beta$ -diketimines derived from isoquinoline and 2-aminonaphthalene)

RN 664302-70-9 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-, (-)-(9CI) (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
6.29	167.83

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-0.73	-0.73

CA SUBSCRIBER PRICE

FILE 'REGISTRY' ENTERED AT 11:07:17 ON 09 MAR 2005

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STRUCTURE FILE UPDATES: 6 MAR 2005 HIGHEST RN 843607-47-6

DICTIONARY FILE UPDATES: 6 MAR 2005 HIGHEST RN 843607-47-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

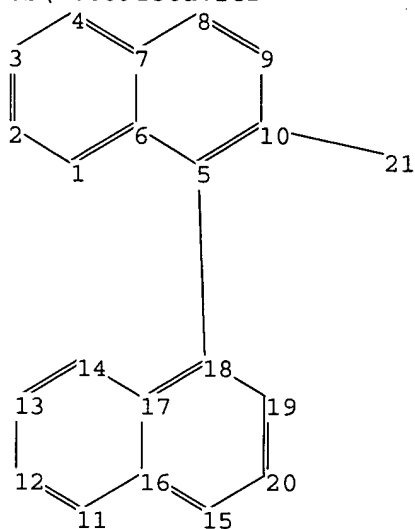
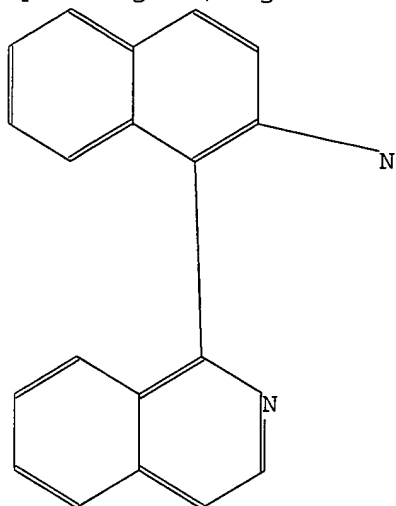
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10689156a.str



chain nodes :

21

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

chain bonds :

5-18 10-21

ring bonds :

1-2 1-6 2-3 3-4 4-7 5-6 5-10 6-7 7-8 8-9 9-10 11-12 11-16 12-13 13-14  
14-17 15-16 15-20 16-17 17-18 18-19 19-20

exact/norm bonds :

10-21

exact bonds :

5-18

normalized bonds :

1-2 1-6 2-3 3-4 4-7 5-6 5-10 6-7 7-8 8-9 9-10 11-12 11-16 12-13 13-14  
14-17 15-16 15-20 16-17 17-18 18-19 19-20

isolated ring systems :

containing 1 : 11 :

Match level :

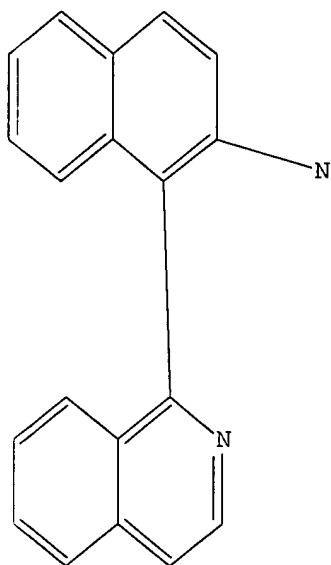
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom  
20:Atom 21:CLASS

L5 STRUCTURE UPLOADED

=> d 15

L5 HAS NO ANSWERS

L5 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 15  
 SAMPLE SEARCH INITIATED 11:07:34 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 4 TO ITERATE

100.0% PROCESSED 4 ITERATIONS 1 ANSWERS  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 4 TO 200  
 PROJECTED ANSWERS: 1 TO 80

L6 1 SEA SSS SAM L5

=> s 15 sss full  
 FULL SEARCH INITIATED 11:07:42 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 73 TO ITERATE

100.0% PROCESSED 73 ITERATIONS  
 SEARCH TIME: 00.00.01

23 ANSWERS

L7 23 SEA SSS FUL L5

=> FIL CAPLUS  
 COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
161.33	329.16

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-0.73

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03/09/2005 10689156.trn

FILE 'CAPLUS' ENTERED AT 11:07:46 ON 09 MAR 2005  
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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11  
FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 17  
L8

5 L7

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.45	329.61
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.73

FILE 'REGISTRY' ENTERED AT 11:08:30 ON 09 MAR 2005  
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STRUCTURE FILE UPDATES: 6 MAR 2005 HIGHEST RN 843607-47-6  
DICTIONARY FILE UPDATES: 6 MAR 2005 HIGHEST RN 843607-47-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

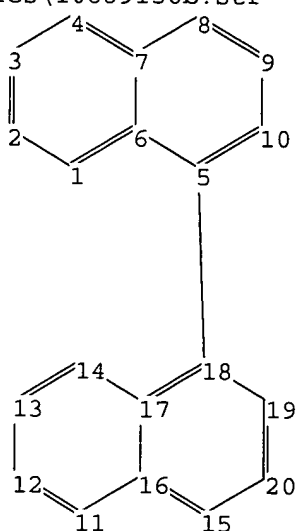
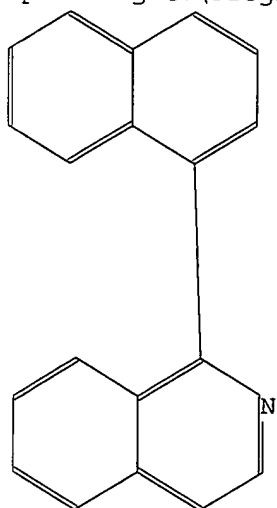
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10689156b.str



ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

chain bonds :

5-18

ring bonds :

1-2 1-6 2-3 3-4 4-7 5-6 5-10 6-7 7-8 8-9 9-10 11-12 11-16 12-13 13-14  
14-17 15-16 15-20 16-17 17-18 18-19 19-20

exact bonds :

5-18

normalized bonds :

1-2 1-6 2-3 3-4 4-7 5-6 5-10 6-7 7-8 8-9 9-10 11-12 11-16 12-13 13-14  
14-17 15-16 15-20 16-17 17-18 18-19 19-20

isolated ring systems :

containing 1 : 11 :

Match level :

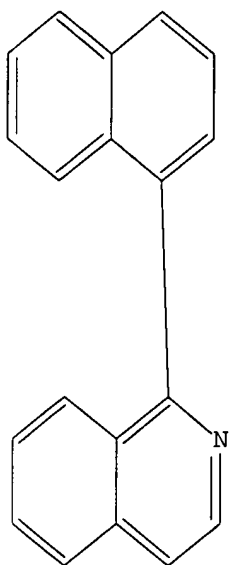
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom  
20:Atom

L9 STRUCTURE UPLOADED

=> d 19

L9 HAS NO ANSWERS

L9 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 19

SAMPLE SEARCH INITIATED 11:08:50 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 203 TO ITERATE

100.0% PROCESSED 203 ITERATIONS  
SEARCH TIME: 00.00.01

11 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 3206 TO 4914  
PROJECTED ANSWERS: 22 TO 418

L10 11 SEA SSS SAM L9

=> s 19 sss full

FULL SEARCH INITIATED 11:08:57 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 3910 TO ITERATE

100.0% PROCESSED 3910 ITERATIONS  
SEARCH TIME: 00.00.01

114 ANSWERS

L11 114 SEA SSS FUL L9

=> FIL CAPLUS

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
161.33	490.94

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-0.73

CA SUBSCRIBER PRICE

03/09/2005 10689156.trn

FILE 'CAPLUS' ENTERED AT 11:09:02 ON 09 MAR 2005  
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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11  
FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l11  
L12 75 L11  
  
=> s l12 and py<=2003  
23606201 PY<=2003  
L13 59 L12 AND PY<=2003  
  
=> s l13 and p/dt  
4647178 P/DT  
L14 7 L13 AND P/DT  
=> d his

(FILE 'HOME' ENTERED AT 11:05:01 ON 09 MAR 2005)

FILE 'REGISTRY' ENTERED AT 11:05:13 ON 09 MAR 2005  
L1 STRUCTURE UPLOADED  
L2 0 S L1  
L3 1 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 11:05:41 ON 09 MAR 2005  
L4 1 S L3

FILE 'REGISTRY' ENTERED AT 11:07:17 ON 09 MAR 2005  
L5 STRUCTURE UPLOADED  
L6 1 S L5  
L7 23 S L5 SSS FULL

FILE 'CAPLUS' ENTERED AT 11:07:46 ON 09 MAR 2005  
L8 5 S L7

FILE 'REGISTRY' ENTERED AT 11:08:30 ON 09 MAR 2005  
L9 STRUCTURE UPLOADED  
L10 11 S L9  
L11 114 S L9 SSS FULL

FILE 'CAPLUS' ENTERED AT 11:09:02 ON 09 MAR 2005

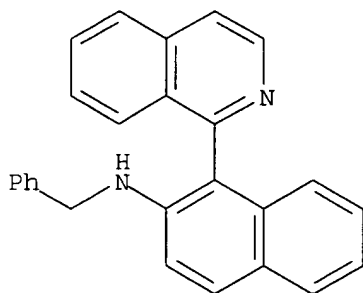
L12 75 S L11  
L13 59 S L12 AND PY<=2003  
L14 7 S L13 AND P/DT

=> d l8 ibib abs hitstr tot

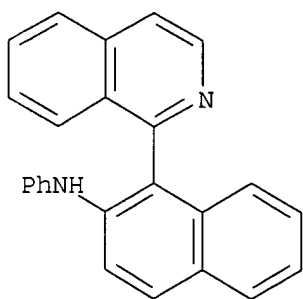
L8 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2004:943012 CAPLUS  
DOCUMENT NUMBER: 142:114146  
TITLE: A Remarkably Facile Zirconium(IV) → Aluminum(III) β-Diketiminato Transmetalation That Also Results in a More Active Olefin Polymerization Catalyst upon Activation.  
AUTHOR(S): Cortright, Sarah B.; Coalter, Joseph N., III; Pink, Maren; Johnston, Jeffrey N.  
CORPORATE SOURCE: Department of Chemistry, Indiana University, Bloomington, IN, 47405-7102, USA  
SOURCE: Organometallics (2004) 23(25), 5885-5888  
CODEN: ORGND7; ISSN: 0276-7333  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB (R-IAN)2ZrX2 complexes, where X = NMe2, Cl, have recently emerged as effective olefin polymerization precatalysts bearing chiral ligands formally of the β-dialuminum ketimine class. An attempt to exchange dimethylamido ligands for alkyl (methyl) using the Jordan protocol resulted in a surprisingly facile transmetalation of the bidentate Me-IAN ligands from Zr(IV) to Al(III). An initial study of the process and the finding that the (R-IAN)AlMe2 complexes that result are more potent precatalysts themselves provide a case study within the rapidly growing area of catalysis based on β-diketiminato metal complexes.

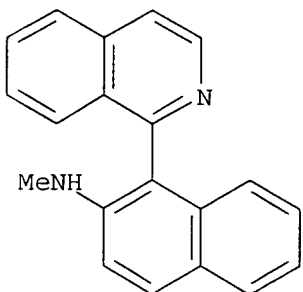
IT 820235-58-3 820235-59-4 820236-07-5  
RL: RCT (Reactant); RACT (Reactant or reagent)  
((diketiminato)zirconium transmetalation with trimethylaluminum to give aluminum beta-diketiminato catalyst for olefin polymerization)  
RN 820235-58-3 CAPLUS  
CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-(phenylmethyl)-, (1R)- (9CI) (CA INDEX, NAME)



RN 820235-59-4 CAPLUS  
CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-phenyl-, (1R)- (9CI) (CA INDEX NAME)



RN 820236-07-5 CAPLUS  
CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-methyl-, (1R)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:293518 CAPLUS

DOCUMENT NUMBER: 141:32878

TITLE: IAN Amines: Chiral C2-Symmetric Zirconium(IV) Complexes from Readily Modified Axially Chiral C1-Symmetric  $\beta$ -Diketimines

AUTHOR(S): Cortright, Sarah B.; Huffman, John C.; Yoder, Ryan A.; Coalter, Joseph N., III; Johnston, Jeffrey N.

CORPORATE SOURCE: Department of Chemistry, Indiana University, Bloomington, IN, 47405-7102, USA

SOURCE: Organometallics (2004), 23(10), 2238-2250  
CODEN: ORGND7; ISSN: 0276-7333

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:32878

AB A general synthesis of  $\beta$ -diketimines derived from Isoquinoline and AminoNaphthalene components (IAN amines) is reported. Beginning from inexpensive 2-naphthol and isoquinoline, the sequence of reactions leading to 1-[2-(organoamino)naphth-1-yl]isoquinolines (R-IAN amines) is convergent, short, and high-yielding. Several new derivs. are reported (e.g., R = Bn, iPr, tBu, Ph, 2,6-Me<sub>2</sub>Ph, 2,6-iPr<sub>2</sub>Ph, 2-Np). All of these were complexed to Zr(IV) by transamination with Zr(NMe<sub>2</sub>)<sub>4</sub>, and in all cases 1:1 R-IAN:Zr complexes immediately formed at 25°. Except in cases of severe steric hindrance (iPr-IAN and 2,6-Me<sub>2</sub>Ph), the corresponding 2:1 IAN:Zr complexes formed at 25-100° in toluene. A

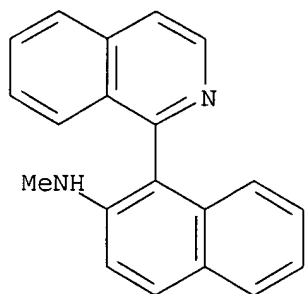
feature conserved among all 2:1 IAN:Zr complexes was a remarkable degree of diastereoselectivity favoring a C2-sym. bis( $\beta$ -diketiminate) isomer bearing cis-NMe<sub>2</sub> and cis-pyridyl ligands. Although all complexations were performed from rac-IAN, the resulting complexes are composed solely of homochiral ligands. The configurational integrity of Me-IAN and its ability to transfer asymmetry upon metal coordination was demonstrated in the catalyzed enantioselective addition of diethylzinc to benzaldehyde. Given the topog. similarity between these and metallocene complexes, several derivs. were preliminarily evaluated in ethylene polymerization

IT **697756-46-0P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and hydrolysis of)

RN 697756-46-0 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-methyl-, (+)- (9CI) (CA INDEX NAME)

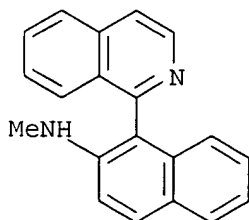


IT **412950-35-7**

RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)  
(racemate; crystal structure and stereoselective complexation with diethylzinc(II))

RN 412950-35-7 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-methyl- (9CI) (CA INDEX NAME)



IT **473699-20-6P 473699-22-8P 473699-24-0P**

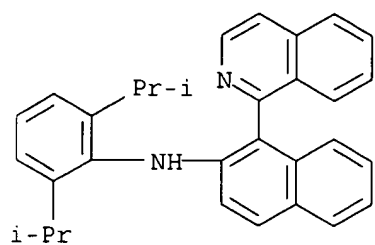
**473699-28-4P 473699-63-7P 663948-30-9P**

**663948-31-0P 697741-32-5P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(racemate; preparation and stereoselective complexation with zirconium(IV) diethylamide via transamination)

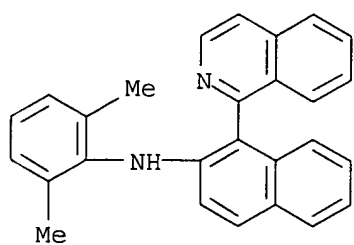
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CN 2-Naphthalenamine, N-[2,6-bis(1-methylethyl)phenyl]-1-(1-isoquinolinyl)- (9CI) (CA INDEX NAME)



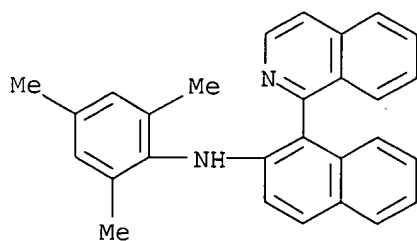
RN 473699-22-8 CAPLUS

CN 2-Naphthalenamine, N-(2,6-dimethylphenyl)-1-(1-isoquinolinyl)- (9CI) (CA INDEX NAME)



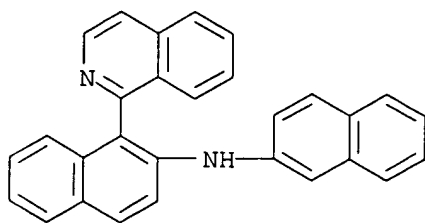
RN 473699-24-0 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



RN 473699-28-4 CAPLUS

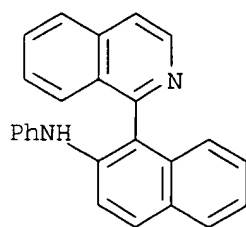
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RN 473699-63-7 CAPLUS

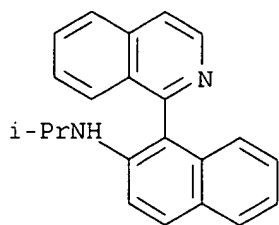
CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-phenyl- (9CI) (CA INDEX NAME)





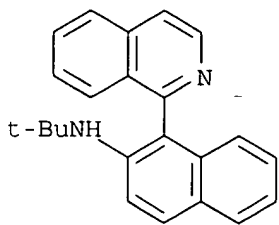
RN 663948-30-9 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



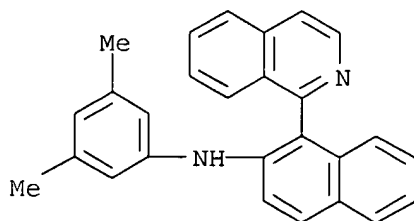
RN 663948-31-0 CAPLUS

CN 2-Naphthalenamine, N-(1,1-dimethylethyl)-1-(1-isoquinolinyl)- (9CI) (CA INDEX NAME)



RN 697741-32-5 CAPLUS

CN 2-Naphthalenamine, N-(3,5-dimethylphenyl)-1-(1-isoquinolinyl)- (9CI) (CA INDEX NAME)



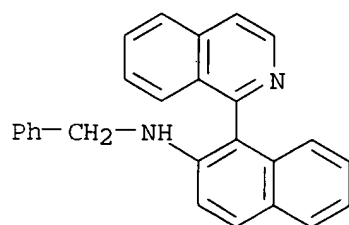
IT 697741-31-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(racemate; preparation, complexation with zirconium(IV) diethylamide via transamination, and subsequent iodination with Me iodide)

RN 697741-31-4 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinoliny)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



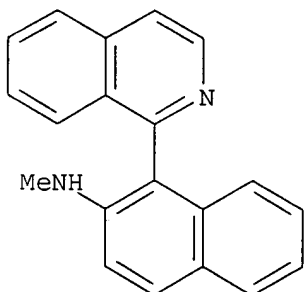
IT 664302-73-2

RL: CAT (Catalyst use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)

(reaction with diethylzinc to generate catalyst for stereoselective addition of diethylzinc to benzaldehyde)

RN 664302-73-2 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinoliny)-N-methyl-, (-)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 105 THERE ARE 105 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L8 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:15223 CAPLUS

DOCUMENT NUMBER: 140:217129

TITLE: Enantioenriched axially chiral  $\beta$ -diketimines: Determination of the imine-amine barrier to atropisomerization

AUTHOR(S): Cortright, Sarah B.; Yoder, Ryan A.; Johnston, Jeffrey N.

CORPORATE SOURCE: Department of Chemistry, Indiana University, Bloomington, IN, 47405-7102, USA

SOURCE: Heterocycles (2004), 62, 223-227

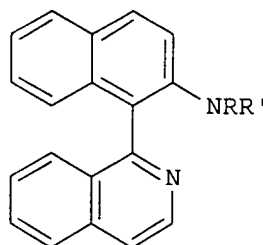
CODEN: HTCYAM; ISSN: 0385-5414

PUBLISHER: Japan Institute of Heterocyclic Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



I

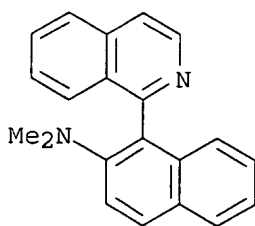
AB Enantioenriched (>98% ee)  $\beta$ -diketimines derived from Isoquinoline and 2-Amino Naphthalene ("IAN-amines") were prepared Thermal racemization of a series of R-IAN amines (I; R,R' = H,H; Me,H; Me,Me ) revealed a high barrier to atropisomerization (.apprx.30 kcal/mol) and its relative insensitivity to substitution at the aminonaphthalene nitrogen. Mol. mechanics calcns. accurately predicted the observed relative substituent effects.

IT 473699-61-5 473699-63-7 663948-30-9  
663948-31-0 663948-32-1 663948-33-2  
664302-70-9 664302-73-2

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)  
(determination of barrier to atropisomerization in enantioenriched axially chiral  $\beta$ -diketimines derived from isoquinoline and 2-aminonaphthalene)

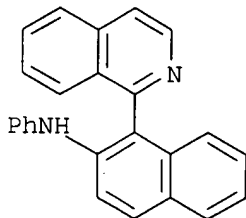
RN 473699-61-5 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 473699-63-7 CAPLUS

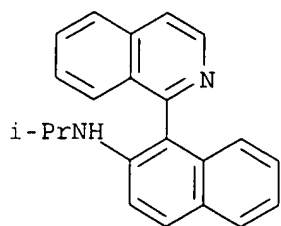
CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-phenyl- (9CI) (CA INDEX NAME)



RN 663948-30-9 CAPLUS

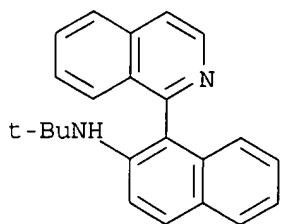
03/09/2005 10689156.trn

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



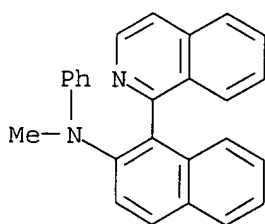
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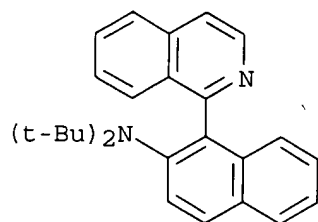
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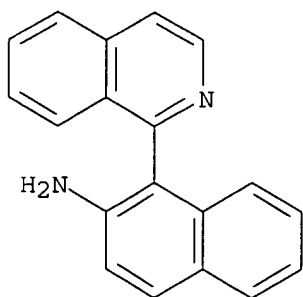
CN 2-Naphthalenamine, N,N-bis(1,1-dimethylethyl)-1-(1-isoquinolinyl)- (9CI) (CA INDEX NAME)



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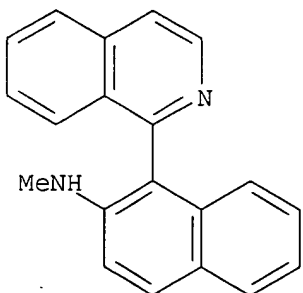
RN 664302-70-9 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-, (-)- (9CI) (CA INDEX NAME)



RN 664302-73-2 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-methyl-, (-)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:832739 CAPLUS

DOCUMENT NUMBER: 137:345195

TITLE: Preparation of chiral (2-aminonaphthyl)isoquinoline derivatives and their metal complexes as enantioselective ethylation catalysts and precatalysts for olefin polymerization

INVENTOR(S): Johnston, Jeffrey N.

PATENT ASSIGNEE(S): Indian University, USA

SOURCE: PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002085820	A2	20021031	WO 2002-US12609	20020422
WO 2002085820	A3	20030605		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,  
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,  
UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,  
GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,  
GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2004143118

A1

20040722

US 2003-689156

20031020

PRIORITY APPLN. INFO.:

US 2001-285631P

P 20010420

WO 2002-US12609

A1 20020422

OTHER SOURCE(S):

CASREACT 137:345195; MARPAT 137:345195

AB The preparation of chiral 1-(2-aminonaphth-1-yl)isoquinoline derivs. and their metal complexes having C2 symmetry are described. Thus, zirconium complexes [Zr(L)Cl<sub>2</sub>] {HL = 1-(2-(methylamino)naphth-1-yl)isoquinoline} and [Zr(L')Me<sub>2</sub>] {HL' = 1-(2-(phenylamino)naphth-1-yl)isoquinoline} were prepared and tested as precatalysts for ethylene polymerization. Also, (+)-HL and Et<sub>2</sub>Zn were mixed in toluene and used for the enantioselective ethylation of benzaldehyde.

IT **473699-61-5 473699-63-7 473804-74-9**

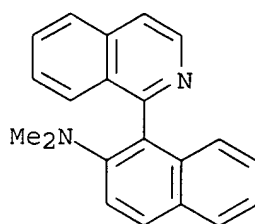
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of transition metal (aminonaphthyl)isoquinoline complexes as olefin polymerization precatalysts and enantioselective ethylation

catalysts)

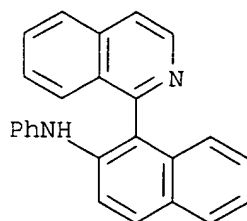
RN 473699-61-5 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



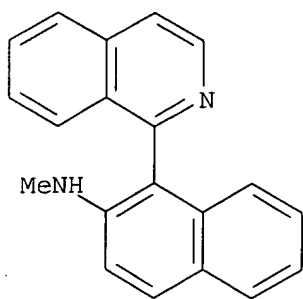
RN 473699-63-7 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-phenyl- (9CI) (CA INDEX NAME)



RN 473804-74-9 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-methyl-, (1S)- (9CI) (CA INDEX NAME)



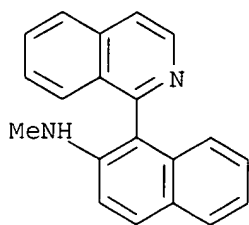
IT 412950-35-7P 413598-05-7P 413598-06-8P  
 473699-20-6P 473699-22-8P 473699-24-0P  
 473699-26-2P 473699-28-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(preparation of transition metal (aminonaphthyl)isoquinoline complexes as  
 olefin polymerization precatalysts and enantioselective ethylation  
 catalysts)

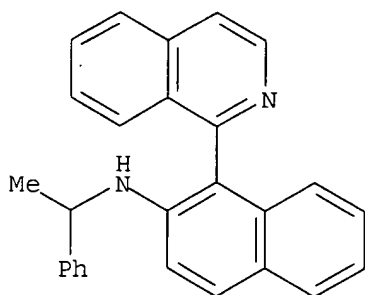
RN 412950-35-7 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-methyl- (9CI) (CA INDEX NAME)



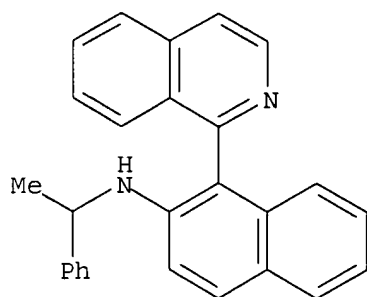
RN 413598-05-7 CAPLUS

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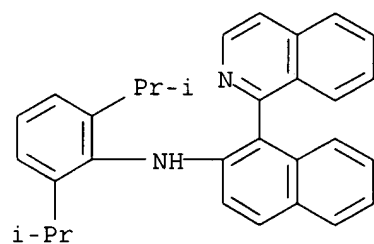


RN 413598-06-8 CAPLUS

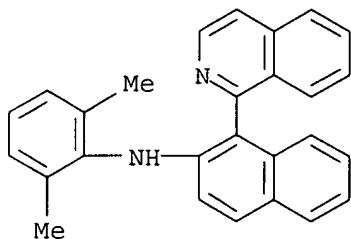
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 (9CI) (CA INDEX NAME)



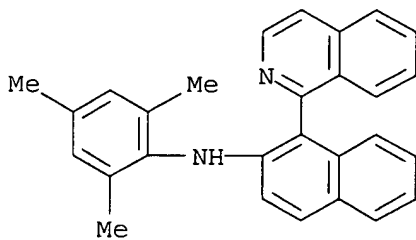
RN 473699-20-6 CAPLUS

CN 2-Naphthalenamine, N-[2,6-bis(1-methylethyl)phenyl]-1-(1-isoquinolinyl)-  
(9CI) (CA INDEX NAME)

RN 473699-22-8 CAPLUS

CN 2-Naphthalenamine, N-(2,6-dimethylphenyl)-1-(1-isoquinolinyl)- (9CI) (CA  
INDEX NAME)

RN 473699-24-0 CAPLUS

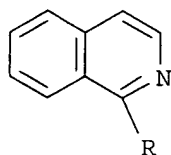
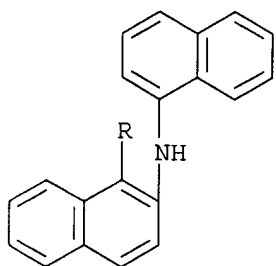
CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-(2,4,6-trimethylphenyl)- (9CI)  
(CA INDEX NAME)

RN 473699-26-2 CAPLUS



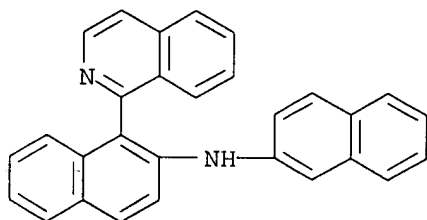
03/09/2005 10689156.trn

CN 1-Naphthalenamine, N-[1-(1-isoquinolinyl)-2-naphthalenyl]- (9CI) (CA INDEX NAME)



RN 473699-28-4 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-2-naphthalenyl- (9CI) (CA INDEX NAME)



L8 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:108159 CAPLUS

DOCUMENT NUMBER: 136:334243

TITLE: IAN-amines: direct entry to a chiral C2-symmetric zirconium(IV)  $\beta$ -diketiminate complex

AUTHOR(S): Cortright, Sarah B.; Johnston, Jeffrey N.

CORPORATE SOURCE: Department of Chemistry, Indiana University, Bloomington, IN, 47405, USA

SOURCE: Angewandte Chemie, International Edition (2002), 41(2), 345-348

~~CODEN: ANCH~~ CODEN: ANCH 57 ISSN: 1433-7851

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The synthesis of amine ligands with binaphthyl backbone derived from isoquinoline and 2-aminonaphthalene (IAN-amines) is described. Racemic 2-methylamino-1-(isoquinolin-1'-yl)naphthalene (I) and 2-[(S)- $\alpha$ -methylbenzylamino]-1-(isoquinolin-1'-yl)naphthalene (2 axial diastereomers) were obtained. The complexation behavior of these

ligands was examined using  $\text{Zr}(\text{NMe}_2)_4$ . Crystal data and ORTEP diagrams of amine/Zr-complexes (Zr ligands NMe2 and Cl) from I are presented. IAN-amines are a class of configurationally stable axially chiral  $\beta$ -diketimines that provide direct access to C2-sym. nonmetallocene group IV metal complexes.

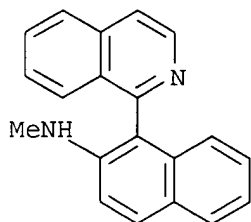
IT 412950-35-7P 413598-05-7P 413598-06-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and complexation with zirconium)

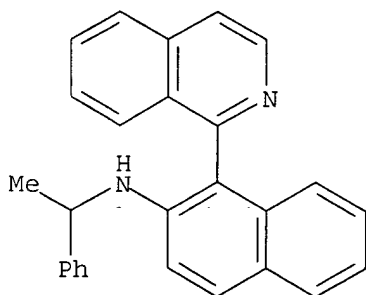
RN 412950-35-7 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-methyl- (9CI) (CA INDEX NAME)



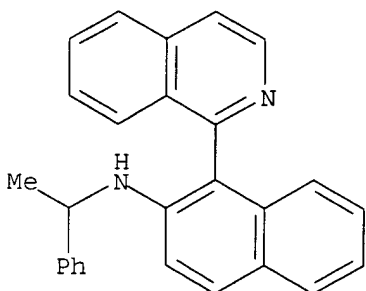
RN 413598-05-7 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-[(1S)-1-phenylethyl]-, (1R)- (9CI) (CA INDEX NAME)



RN 413598-06-8 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-[(1S)-1-phenylethyl]-, (1S)- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

43

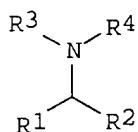
THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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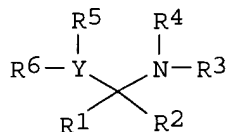
L14 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2003:93074 CAPLUS  
 DOCUMENT NUMBER: 138:153227  
 TITLE: Preparation of amines via catalytic hydrogenation of  
 amins and related compounds  
 PATENT ASSIGNEE(S): Degussa AG, Germany  
 SOURCE: Ger. Offen., 22 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: **Patent**  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10133782	A1	20030206	DE 2001-10133782	20010716 <--
PRIORITY APPLN. INFO.:			DE 2001-10133782	20010716
OTHER SOURCE(S):		CASREACT 138:153227; MARPAT 138:153227		

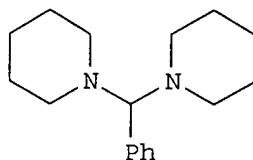
GI



I



II



III

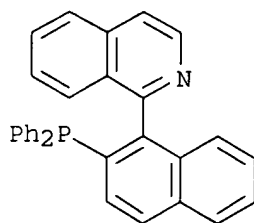
AB A process for the preparation of title compds. I via catalytic hydrogenation of amins and related compds. II [Y = O, N with the proviso that when Y = O, then R5 or R6 = free pair of electrons; R1, R2, R3, R4, R5, R6 = H, alkyl, alkenyl, etc.] is disclosed. For example, a mixture of phenylmethane III (5.0 mmol), [Rh(DPOE)COD]BF<sub>4</sub> (0.01 mmol) in methanol (10 mL) was stirred under hydrogen gas (52 bar) for 1.5 h. Evaporation of the solvent afforded N-benzylpiperidine in quant. yield. Approx. 17-specific examples of compds. I were prepared

IT **149341-34-4**

RL: RGT (Reagent); RACT (Reactant or reagent)  
 (preparation of amines via catalytic hydrogenation of amins and related compds.)

RN 149341-34-4 CAPLUS

CN Isoquinoline, 1-[2-(diphenylphosphino)-1-naphthalenyl]-, (1R)- (9CI) (CA INDEX NAME)



L14 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2002:832739 CAPLUS  
 DOCUMENT NUMBER: 137:345195  
 TITLE: Preparation of chiral (2-aminonaphthyl)isoquinoline derivatives and their metal complexes as enantioselective ethylation catalysts and precatalysts for olefin polymerization  
 INVENTOR(S): Johnston, Jeffrey M.  
 PATENT ASSIGNEE(S): Indiana University, USA  
 SOURCE: PCT Int. Appl., 54 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002085820	A2	20021031	WO 2002-US12609	20020422 <--
WO 2002085820	A3	20030605		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004143118	A1	20040722	US 2003-689156	20031020
PRIORITY APPLN. INFO.:			US 2001-285631P	P 20010420
			WO 2002-US12609	A1 20020422

OTHER SOURCE(S): CASREACT 137:345195; MARPAT 137:345195

AB The preparation of chiral 1-(2-aminonaphth-1-yl)isoquinoline derivs. and their metal complexes having C2 symmetry are described. Thus, zirconium complexes [Zr(L)Cl<sub>2</sub>] {HL = 1-(2-(methylamino)naphth-1-yl)isoquinoline} and [Zr(L')Me<sub>2</sub>] {HL' = 1-(2-(phenylamino)naphth-1-yl)isoquinoline} were prepared and tested as precatalysts for ethylene polymerization. Also, (+)-HL and Et<sub>2</sub>Zn were mixed in toluene and used for the enantioselective ethylation of benzaldehyde.

IT 473699-61-5 473699-63-7 473804-74-9

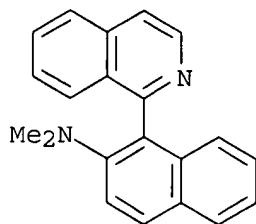
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of transition metal (aminonaphthyl)isoquinoline complexes as olefin polymerization precatalysts and enantioselective ethylation catalysts)

RN 473699-61-5 CAPLUS

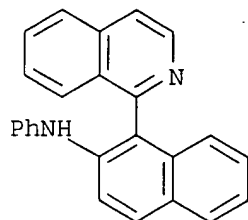
03/09/2005 10689156.trn

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



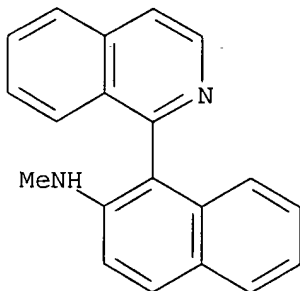
RN 473699-63-7 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-phenyl- (9CI) (CA INDEX NAME)



RN 473804-74-9 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-methyl-, (1S)- (9CI) (CA INDEX NAME)



IT 412950-35-7P 413598-05-7P 413598-06-8P

473699-20-6P 473699-22-8P 473699-24-0P

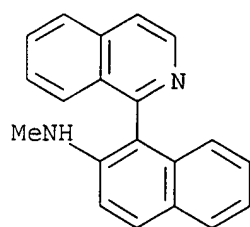
473699-26-2P 473699-28-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

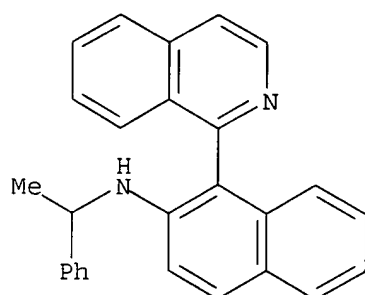
(preparation of transition metal (aminonaphthyl)isoquinoline complexes as olefin polymerization precatalysts and enantioselective ethylation catalysts)

RN 412950-35-7 CAPLUS

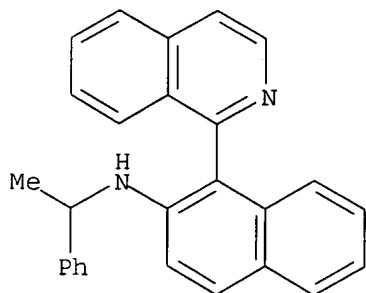
CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-methyl- (9CI) (CA INDEX NAME)



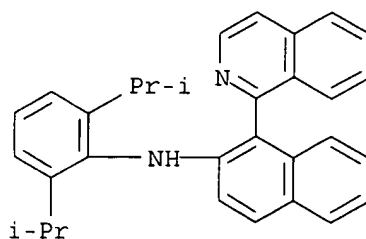
RN 413598-05-7 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-[(1S)-1-phenylethyl]-, (1R)-  
(9CI) (CA INDEX NAME)

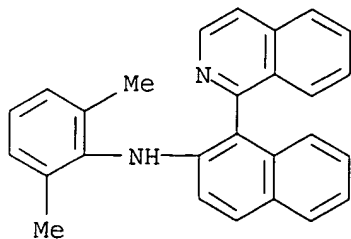
RN 413598-06-8 CAPLUS

CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-[(1S)-1-phenylethyl]-, (1S)-  
(9CI) (CA INDEX NAME)

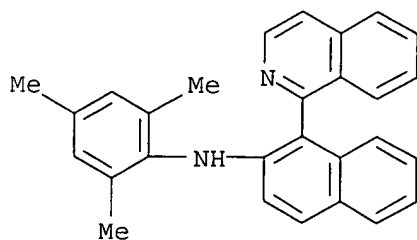
RN 473699-20-6 CAPLUS

CN 2-Naphthalenamine, N-[2,6-bis(1-methylethyl)phenyl]-1-(1-isoquinolinyl)-  
(9CI) (CA INDEX NAME)

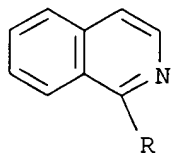
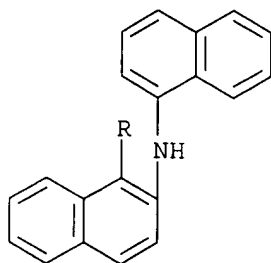
RN 473699-22-8 CAPLUS  
CN 2-Naphthalenamine, N-(2,6-dimethylphenyl)-1-(1-isoquinolinyl)- (9CI) (CA INDEX NAME)



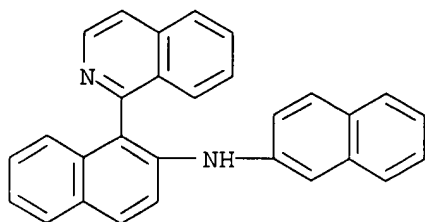
RN 473699-24-0 CAPLUS  
CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



RN 473699-26-2 CAPLUS  
CN 1-Naphthalenamine, N-[1-(1-isoquinolinyl)-2-naphthalenyl]- (9CI) (CA INDEX NAME)

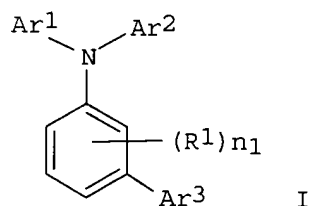


RN 473699-28-4 CAPLUS  
CN 2-Naphthalenamine, 1-(1-isoquinolinyl)-N-2-naphthalenyl- (9CI) (CA INDEX NAME)



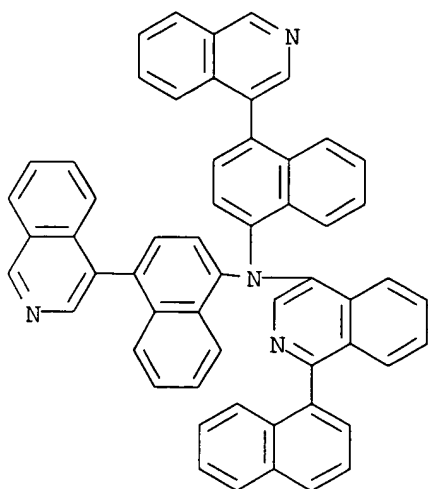
L14 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2002:465654 CAPLUS  
 DOCUMENT NUMBER: 137:39157  
 TITLE: Organic electroluminescent element, material and display  
 INVENTOR(S): Yamada, Taketoshi; Ueda, Noriko; Matsuura, Mitsunobu; Kita, Hiroshi  
 PATENT ASSIGNEE(S): Konica Co., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 45 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: **Patent**  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002175883	A2	20020621	JP 2001-231650	20010731 <--
PRIORITY APPLN. INFO.:			JP 2000-285050	A 20000920
			JP 2000-292124	A 20000926
OTHER SOURCE(S):		MARPAT 137:39157		
GI				



AB The invention refers to an organic electroluminescent device comprising the compound I [Ar1-3 = (un)substituted aromatic hydrocarbon(heterocycllyl); R1 = alkyl, halo, alkoxy; n1 = 0 - 4].  
 IT **436086-61-2**  
 RL: DEV (Device component use); USES (Uses)  
 (organic electroluminescent element, material and display)  
 RN 436086-61-2 CAPLUS  
 CN 4-Isoquinolinamine, N,N-bis[4-(4-isoquinolinyl)-1-naphthalenyl]-1-(1-naphthalenyl)- (9CI) (CA INDEX NAME)





L14 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:220505 CAPLUS

DOCUMENT NUMBER: 136:264828

TITLE: Catalytic hydrogenation processes using ruthenium phosphine complexes

INVENTOR(S): Rautenstrauch, Valentin; Challand, Rene; Churlaud, Raphael; Morris, Robert Harold; Abdur-Rashid, Kamaluddin; Brazi, Eric; Mimoun, Robert

PATENT ASSIGNEE(S): Firmenich S.A., Switz.

SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002022526	A2	20020321	WO 2001-IB1657	20010911 <--
WO 2002022526	A3	20030912		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2422029	AA	20020321	CA 2001-2422029	20010911 <--
AU 2001080028	A5	20020326	AU 2001-80028	20010911 <--
EP 1366004	A2	20031203	EP 2001-958310	20010911 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004509087	T2	20040325	JP 2002-526727	20010911
US 2004063966	A1	20040401	US 2003-380483	20030903
PRIORITY APPLN. INFO.:			US 2000-232144P	P 20000913

WO 2000-IB1303 W 20000913  
 WO 2001-IB1657 W 20010911

OTHER SOURCE(S): MARPAT 136:264828

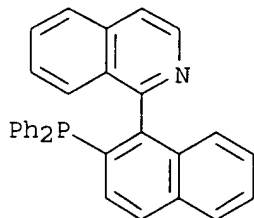
AB The catalysts  $[\text{Ru}(\text{L})_m(\text{L}')_w\text{XY}]$ , wherein X and Y represent simultaneously or independently a H or halogen atom, a hydroxy group, or an alkoxy, carboxyl or other anionic radical,  $m = 1$  or  $2$ ,  $w = 1$  when  $m$  is  $1$  and  $w = 0$  when  $m = 2$ , L is a phosphino-amine or phosphino-imine bidentate ligand and L' a diphosphine, are useful for the hydrogenation of substrates having a C-hetero atom double bond. For example,  $[\text{RuHClL}_2]$  (L = (2-aminoethyl)diphenylphosphine) was prepared from  $[\text{RuCl}_2(\text{COD})]_n$  and L under Ar in iPrOH in presence of NaOH.  $[\text{RuHClL}_2]$  was used as a catalyst for the hydrogenation of acetophenone with 100% conversion.

IT 149341-33-3

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reactant for preparation of ruthenium phosphine mixed ligand complexes as hydrogenation catalyst for imines and ketones)

RN 149341-33-3 CAPLUS

CN Isoquinoline, 1-[2-(diphenylphosphino)-1-naphthalenyl]-, (1S)- (9CI) (CA INDEX NAME)



L14 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:271994 CAPLUS

DOCUMENT NUMBER: 132:293884

TITLE: Preparation of optically active aryloxyacyl platinum(II) complexes as catalysts

INVENTOR(S): Fujimura, Osamu; Tanaka, Mitsuhiro; Ataka, Kikuo

PATENT ASSIGNEE(S): Ube Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

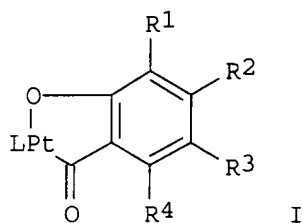
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000119285	A2	20000425	JP 1998-283656	19981006 <--
PRIORITY APPLN. INFO.:			JP 1998-283656	19981006
OTHER SOURCE(S):			CASREACT 132:293884; MARPAT 132:293884	
GI				

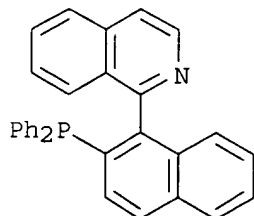


AB Title compds. I (R1-R4 = H, halo, alkyl, alkenyl, aryl, alkoxy, etc.; L = optically active N-P heterobidentate ligand) are prepared Thus, potassium tetrachloroplatinate was reacted with 3,5-di-tert-butyl-2-hydroxybenzaldehyde (3,5-DTBSH2) and (S)-2-[2-(diphenylphosphino)phenyl]-4-isopropyl-4,5-dihydrooxazole [(S)-DPIPO] in the presence of Na2CO3 in DMSO at 100° to give 69% Pt(3,5-DTBS)[(S)-DPIPO]. Reaction of styrene and phenyldimethylsilane in the presence of Pt(3,5-DTBS)[(S)-DPIPO] at room temperature for 1.5 h gave 99% dimethylphenethylphenylsilane.

IT **149341-33-3**, (S)-QUINAP  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (catalyst ligand; preparation of optically active aryloxyacyl platinum complexes as catalysts)

RN 149341-33-3 CAPLUS

CN Isoquinoline, 1-[2-(diphenylphosphino)-1-naphthalenyl]-, (1S)- (9CI) (CA INDEX NAME)



L14 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:53646 CAPLUS

DOCUMENT NUMBER: 132:108101

TITLE: Biaryl phosphine and amine ligands for improved transition metal-catalyzed processes

INVENTOR(S): Buchwald, Stephen; Old, David W.; Wolfe, John P.; Palucki, Michael; Kamikawa, Ken; Chieffi, Andrew; Sadighi, Joseph P.; Singer, Robert A.; Ahman, Jens

PATENT ASSIGNEE(S): Massachusetts Institute of Technology, USA

SOURCE: PCT Int. Appl., 397 pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: **Patent**

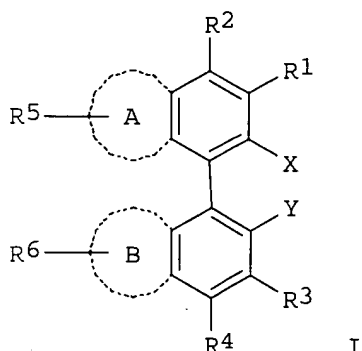
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2000002887	A2	20000120	WO 1999-US15450	19990709 <--

WO 2000002887 A3 20000629  
W: CA, JP  
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE  
US 6395916 B1 20020528 US 1998-113478 19980710 <--  
US 6307087 B1 20011023 US 1999-231315 19990113 <--  
CA 2336691 AA 20000120 CA 1999-2336691 19990709 <--  
EP 1097158 A2 20010509 EP 1999-933785 19990709 <--  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI  
JP 2002520328 T2 20020709 JP 2000-559117 19990709 <--  
PRIORITY APPLN. INFO.: US 1998-113478 A 19980710  
US 1998-196855 A 19981120  
US 1999-231315 A 19990113  
US 1999-239024 A 19990127  
WO 1999-US15450 W 19990709  
OTHER SOURCE(S): MARPAT 132:108101  
GI



AB The present invention relates to the preparation of novel biaryl phosphine and amine ligands (I) [wherein A and B = independently fused monocyclic or polycyclic cycloalkyl, cycloalkenyl, aryl, or heterocyclic rings of 4-8 atoms; X = NR<sub>2</sub>, PR<sub>2</sub>, AsR<sub>2</sub>, OR, or SR; Y = NR<sub>2</sub>, PR<sub>2</sub>, AsR<sub>2</sub>, OR, SR, SiR<sub>3</sub>, alkyl, or H; R-R<sub>6</sub> = independently H, halogen, (hetero)alkyl, alkenyl, alkynyl, hydroxy, alkoxy, silyloxy, amino, nitro, sulfhydryl, amide, carbonyl, ketone, anhydride, silyl, thioalkyl, ketone, ester, nitrile, (hetero)aryl, etc.] for transition metals and their use in metal-catalyzed carbon-heteroatom and carbon-carbon bond-forming reactions. Unexpected improvements over the prior art were demonstrated in transition metal-catalyzed aryl amination reactions, Suzuki couplings giving both biaryl and alkylaryl products, arylations and vinylations at the position  $\alpha$  to carbonyl groups, and carbon-oxygen bond formation. The ligands and methods of the invention enable transformations utilizing aryl chlorides and bromides at room temperature at synthetically useful rates with extremely small amts. of catalyst relative to the limiting reagent. For example, coupling of p-chlorobenzonitrile and morpholine was catalyzed by 2.5 mol% Pd<sub>2</sub>(dba)<sub>3</sub>, 7.5 mol% of 2-(N,N-dimethylamino)-2'-(dicyclohexylphosphino)biphenyl, and NaOBu-t in DME at room temperature to provide 4-(4-morpholinyl)benzonitrile in 96% yield. Thus, the subject processes provide improvements in many features of the transition metal-catalyzed reactions, including the range of suitable substrates,

reaction conditions, and efficiency.

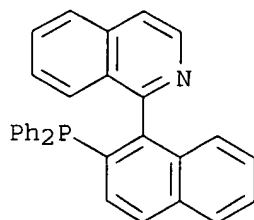
IT 149341-34-4

RL: CAT (Catalyst use); USES (Uses)

(catalyst; preparation of biaryl phosphine and amine ligands for improved palladium-catalyzed amination reactions, Suzuki couplings, arylations, vinylations, and carbon-oxygen bond formation reactions)

RN 149341-34-4 CAPLUS

CN Isoquinoline, 1-[2-(diphenylphosphino)-1-naphthalenyl]-, (1R)- (9CI) (CA INDEX NAME)



L14 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:913318 CAPLUS

DOCUMENT NUMBER: 123:313109

TITLE: Preparation of optically active alcohols and amines by asymmetric hydroboration, using chiral [(diphenylphosphino)naphthyl]isoquinoline complex catalysts

INVENTOR(S): Brown, John Michael

PATENT ASSIGNEE(S): Isis Innovation Ltd., UK

SOURCE: PCT Int. Appl., 37 pp.

CODEN: PIXXD2

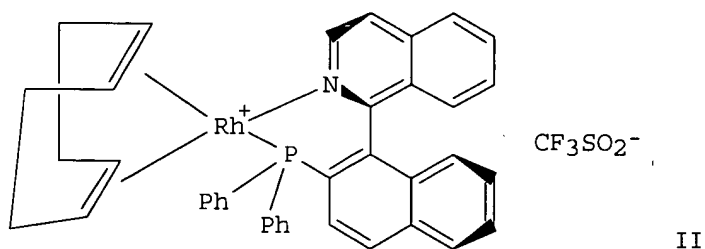
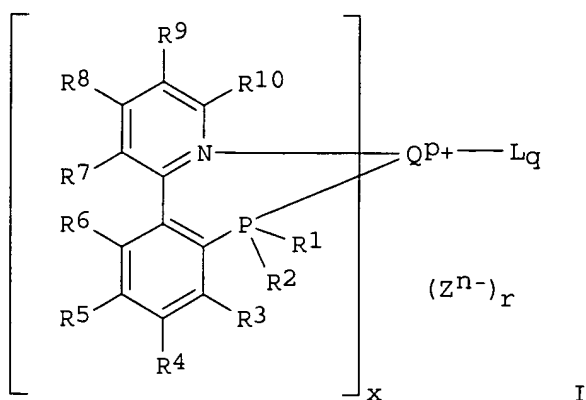
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9513284	A1	19950518	WO 1994-GB2461	19941109 <--
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9481126	A1	19950529	AU 1994-81126	19941109 <--
PRIORITY APPLN. INFO.:			GB 1993-23028	A 19931109
			WO 1994-GB2461	W 19941109
OTHER SOURCE(S):		CASREACT 123:313109; MARPAT 123:313109		
GI				



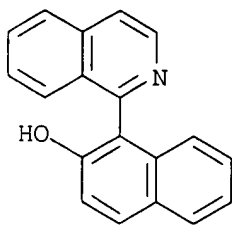
AB A process is claimed, for the reaction of an alkene, allene, or alkyne with a borane in the presence of a catalyst to form an optically active alkylboronate, which may then react with an oxidizing agent to form an optically active alc. or amine. The catalyst may have formula I [Q = Group VIIIA metal ion; R1-R10 = organic groups.; x = 1-3; p = 0-4, L = ligand; q = 1-5; Z = counterion; n = 0-5; r = 0-5]. For example, racemic 1-(2-diphenylphosphino-1-naphthyl)isoquinoline was prepared in 7 steps, and resolved via a diastereomeric Pd complex. Reaction of the (S)-enantiomer with rhodium(I) (1,5-cyclooctadiene) (2,4-pentanedionate) and Me<sub>3</sub>SiOSO<sub>2</sub>CF<sub>3</sub> gave complex II in 100% yield. Reaction of styrene with catecholborane in THF in the presence of 0.2 mol% II, followed by quenching with EtOH, 2M NaOH, and 30% H<sub>2</sub>O<sub>2</sub>, gave (S)-1-phenylethanol in 71% yield with 92.9% optical yield. Preps. of several addnl. catalysts, and hydroborations of other alkenes using II, are described.

IT **131117-42-5P**, 1-(2-Hydroxy-1-naphthyl)isoquinoline  
**149245-03-4P**, (R,S)-1-(2-Diphenylphosphino-1-naphthyl)isoquinoline  
**149245-04-5P**, 1-(2-Methoxy-1-naphthyl)isoquinoline  
**149245-06-7P**, 1-(2-Trifluoromethanesulfonyloxy-1-naphthyl)isoquinoline **149245-07-8P**, 1-(2-Diphenylphosphinyl-1-naphthyl)isoquinoline

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(intermediate; preparation of [(diphenylphosphino)naphthyl]isoquinoline ligands for asym. hydroboration catalysts)

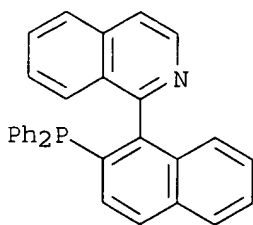
RN 131117-42-5 CAPLUS

CN 2-Naphthalenol, 1-(1-isoquinolinyl)- (9CI) (CA INDEX NAME)



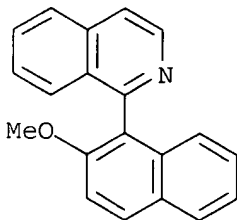
RN 149245-03-4 CAPLUS

CN Isoquinoline, 1-[2-(diphenylphosphino)-1-naphthalenyl]- (9CI) (CA INDEX NAME)



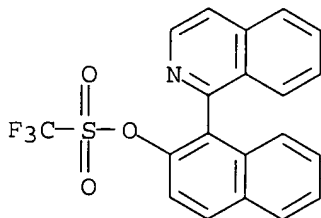
RN 149245-04-5 CAPLUS

CN Isoquinoline, 1-(2-methoxy-1-naphthalenyl)- (9CI) (CA INDEX NAME)



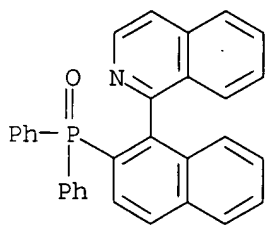
RN 149245-06-7 CAPLUS

CN Methanesulfonic acid, trifluoro-, 1-(1-isoquinolinyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

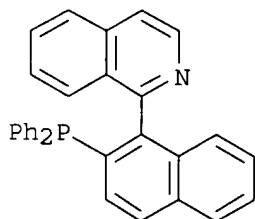


RN 149245-07-8 CAPLUS

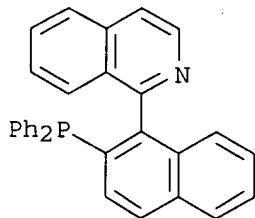
CN Isoquinoline, 1-[2-(diphenylphosphinyl)-1-naphthalenyl]- (9CI) (CA INDEX NAME)



IT 149341-33-3P, (S)-1-(2-Diphenylphosphino-1-naphthyl)isoquinoline  
 149341-34-4P, (R)-1-(2-Diphenylphosphino-1-naphthyl)isoquinoline  
 RL: CAT (Catalyst use); PUR (Purification or recovery); RCT (Reactant);  
 SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or  
 reagent); USES (Uses)  
 (preparation of [(diphenylphosphino)naphthyl]isoquinoline ligands for asym.  
 hydroboration catalysts)  
 RN 149341-33-3 CAPLUS  
 CN Isoquinoline, 1-[2-(diphenylphosphino)-1-naphthalenyl]-, (1S)- (9CI) (CA  
 INDEX NAME)



RN 149341-34-4 CAPLUS  
 CN Isoquinoline, 1-[2-(diphenylphosphino)-1-naphthalenyl]-, (1R)- (9CI) (CA  
 INDEX NAME)



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COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
65.31	556.25

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-8.76	-9.49

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03/09/2005 10689156.trn

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